

=> d his

• (FILE 'HOME' ENTERED AT 15:58:28 ON 17 JUL 2002)

FILE 'REGISTRY' ENTERED AT 15:58:53 ON 17 JUL 2002

L1 1 S 3416-24-8/RN

L2 1 S 3616-42-0/RN

FILE 'CAOLD, CAPLUS, CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, USPAT2, WPIDS' ENTERED AT 16:04:01 ON 17 JUL 2002

FILE 'REGISTRY' ENTERED AT 16:04:20 ON 17 JUL 2002

SET SMARTSELECT ON

L3 SEL L1 1- CHEM : 12 TERMS

SET SMARTSELECT OFF

FILE 'CAOLD, CAPLUS, CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, USPAT2, WPIDS' ENTERED AT 16:04:22 ON 17 JUL 2002

L4 31165 S L3

FILE 'REGISTRY' ENTERED AT 16:09:27 ON 17 JUL 2002

SET SMARTSELECT ON

L5 SEL L2 1- CHEM : 6 TERMS

SET SMARTSELECT OFF

FILE 'CAOLD, CAPLUS, CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, USPAT2, WPIDS' ENTERED AT 16:09:29 ON 17 JUL 2002

L6 838 S L5

FILE 'REGISTRY' ENTERED AT 17:02:45 ON 17 JUL 2002

FILE 'CAOLD, CAPLUS, CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, USPAT2, WPIDS' ENTERED AT 17:02:55 ON 17 JUL 2002

FILE 'REGISTRY' ENTERED AT 17:03:12 ON 17 JUL 2002

L7 1 S 9030-45-9/RN

FILE 'CAOLD, CAPLUS, CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, USPAT2, WPIDS' ENTERED AT 17:03:33 ON 17 JUL 2002

FILE 'REGISTRY' ENTERED AT 17:03:42 ON 17 JUL 2002

SET SMARTSELECT ON

L8 SEL L7 1- CHEM : 17 TERMS

SET SMARTSELECT OFF

FILE 'CAOLD, CAPLUS, CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, USPAT2, WPIDS' ENTERED AT 17:03:43 ON 17 JUL 2002

L9 595 S L8

L10 233 S L9 AND L6 AND L4

L11 228 DUP REM L10 (5 DUPLICATES REMOVED)

L12 131 S L11 AND (FERMENT? OR CULTUR? OR PREP? OR SYNTHES? OR MAK?)

L13 33 S L12 AND MICROORGANISM

L14 33 DUP REM L13 (0 DUPLICATES REMOVED)

=> d 1-33

L14 ANSWER 1 OF 33 CAPLUS COPYRIGHT 2002 ACS
AN 2002:290716 CAPLUS
DN 136:308625
TI Process and materials for production of **glucosamine**
IN Berry, Alan; Burlingame, Richard P.; Millis, James R.
PA Arkion Life Sciences LLC, USA
SO U.S., 84 pp., Cont.-in-part of Appl. No. PCT/us97/00800.
CODEN: USXXAM

DT Patent
LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6372457	B1	20020416	US 1998-115475	19980715
	WO 9830713	A1	19980716	WO 1998-US800	19980114
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	WO 2000004182	A1	20000127	WO 1999-US15976	19990715
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 9951028	A1	20000207	AU 1999-51028	19990715
	EP 1095158	A1	20010502	EP 1999-935577	19990715
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	JP 2002520067	T2	20020709	JP 2000-560279	19990715
PRAI	US 1997-35494P	P	19970114		
	WO 1998-US800	A2	19980114		
	US 1998-115475	A	19980715		
	WO 1999-US15976	W	19990715		

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 33 USPATFULL
AN 2002:119321 USPATFULL
TI HUMAN CARBOHYDRATE METABOLISM ENZYMES
IN BANDMAN, OLGA, MOUNTAIN VIEW, CA, UNITED STATES
HILLMAN, JENNIFER L., MOUNTAIN VIEW, CA, UNITED STATES
LAL, PREETI, SANTA CLARA, CA, UNITED STATES
GUEGLER, KARL J., MENLO PARK, CA, UNITED STATES
GORGONE, GINA, PALO ALTO, CA, UNITED STATES
CORLEY, NEIL C., MOUNTAIN VIEW, CA, UNITED STATES
PATTERSON, CHANDRA, MOUNTAIN VIEW, CA, UNITED STATES
BAUGHN, MARIAH R., SAN JOSE, CA, UNITED STATES

PI US 2002061301 A1 20020523
AI US 1998-79892 A1 19980515 (9)

DT Utility
FS APPLICATION

LN.CNT 3181

INCL INCLM: 424/094.500
INCLS: 435/193.000; 435/006.000; 514/012.000; 530/387.100
NCL NCLM: 424/094.500
NCLS: 435/193.000; 435/006.000; 514/012.000; 530/387.100

IC [7]
ICM: C12Q001-68
GAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 3 OF 33 USPATFULL
AN 2002:48007 USPATFULL
TI Novel **glutamine: fructose-6-phosphate amidotransferase**, its production and use
IN Nishi, Kazunori, Tsukuba, JAPAN
Hikichi, Yukiko, Tsukuba, JAPAN
Shintani, Yasushi, Tsukuba, JAPAN
PA Takeda Chemical Industries, Ltd., Osaka, JAPAN (non-U.S. corporation)
PI US 2002028198 A1 20020307
AI US 2001-771838 A1 20010129 (9)
RLI Division of Ser. No. US 1998-182983, filed on 30 Oct 1998, GRANTED, Pat. No. US 6207431
DT Utility
FS APPLICATION
LN.CNT 3815
INCL INCLM: 424/094.610
INCLS: 514/044.000
NCL NCLM: 424/094.610
NCLS: 514/044.000
IC [7]
ICM: A61K038-47
ICS: A61K048-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 4 OF 33 USPATFULL
AN 2001:43989 USPATFULL
TI **Glutamine:fructose-6-phosphate amidotransferase**, its production and use
IN Nishi, Kazunori, Tsukuba, Japan
Hikichi, Yukiko, Tsukuba, Japan
Shintani, Yasushi, Tsukuba, Japan
PA Tekeda Chemical Industries, Ltd., Osaka, Japan (non-U.S. corporation)
PI US 6207431 B1 20010327
AI US 1998-182983 19981030 (9)
RLI Division of Ser. No. US 1997-911445, filed on 12 Aug 1997, now patented, Pat. No. US 5876713
PRAI JP 1996-213944 19960813
DT Utility
FS Granted
LN.CNT 3177
INCL INCLM: 435/193.000
INCLS: 435/320.100; 435/252.300; 435/252.330; 536/023.200; 536/023.100
NCL NCLM: 435/193.000
NCLS: 435/252.300; 435/252.330; 435/320.100; 536/023.100; 536/023.200
IC [7]
ICM: C12N009-10
ICS: C12N015-00; C12N001-20; C07H021-04
EXF 536/23.1; 536/23.2; 435/320.1; 435/252.3; 435/193; 435/252.33
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2002 ACS
AN 2001:634531 CAPLUS
DN 136:258038
TI Analysis of the chromosome sequence of the legume symbiont *Sinorhizobium meliloti* strain 1021
AU Capela, Delphine; Barloy-Hubler, Frederique; Gouzy, Jerome; Bothe, Gordana; Ampe, Frederic; Batut, Jacques; Boistard, Pierre; Becker, Anke; Boutry, Marc; Cadieu, Edouard; Dreano, Stephane; Gloux, Stephanie; Godrie, Therese; Goffeau, Andre; Kahn, Daniel; Kiss, Erno; Lelaure, Valerie; Masuy, David; Pohl, Thomas; Portetelle, Daniel; Puhler, Alfred; Purnelle, Benedicte; Ramsperger, Ulf; Renard, Clotilde; Thebault, Patricia; Vandenbol, Micheline; Weidner, Stefan; Galibert, Francis
CS Laboratoire de Biologie Moleculaire des Relations Plantes-Microorganismes,

Unite Mixte de Recherche (UMR) 215 Centre National de la Recherche
Scientifique (CNRS), Institut National de la Recherche Agronomique,
Chemin, Tolosan, F-31326, Fr.
SO Proceedings of the National Academy of Sciences of the United States of
America (2001), 98(17), 9877-9882
CODEN: PNASA6; ISSN: 0027-8424
PB National Academy of Sciences
DT Journal
LA English
RE.CNT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2002 ACS
AN 2000:68590 CAPLUS
DN 132:121532
TI **Glucosamine fermentation** with recombinant
microorganisms with mutations in the **glucosamine-
6-phosphate** metabolic pathway
IN Berry, Alan; Burlingame, Richard P.; Millis, James R.
PA DCV, Inc. D/B/A Bio-Technical Resources, USA
SO PCT Int. Appl., 151 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000004182	A1	20000127	WO 1999-US15976	19990715
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6372457	B1	20020416	US 1998-115475	19980715
	AU 9951028	A1	20000207	AU 1999-51028	19990715
	EP 1095158	A1	20010502	EP 1999-935577	19990715
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	JP 2002520067	T2	20020709	JP 2000-560279	19990715
PRAI	US 1998-115475	A	19980715		
	US 1997-35494P	P	19970114		
	WO 1998-US800	A2	19980114		
	WO 1999-US15976	W	19990715		

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 7 OF 33 EUROPATFULL COPYRIGHT 2002 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 1059354 EUROPATFULL ED 20001224 EW 200050 FS OS
TIEN Sequence-determined DNA fragments and corresponding polypeptides encoded thereby.
TIDE DNS-fragmente mit bestimmter Sequenz und die dadurch kodierte Polypeptide.
TIFR Fragments d'ADN avec des sequences determinees et polypeptides encodees par lesdits fragments.
IN Alexandrov, Nickolai, 1404 Oak Trail St., Thousand Oaks, CA 91320, US; Troukhan, Maxim E., 1675 Amberwood Dr. No. 2, South Pasadena, CA 91030, US
PA Ceres Incorporated, 3007 Malibu Canyon Road, Malibu, CA 90265, US
SO Wila-EPZ-2000-H50-T1a
DS R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE;

R IT; R LI; R LU; R MC; R NL; R PT; R SE; R AL; R LT; R LV; R MK; R RO;
R SI
PIT EPA2 EUROPÄISCHE PATENTANMELDUNG
PI EP 1059354 A2 20001213
OD 20001213
AI EP 2000-304943 20000612
PRAI US 1999-138540 19990610
US 1999-138847 19990610
IC ICM C12N015-29
ICS C12N015-82 C07K014-415 C12Q001-68 A01H005-00

L14 ANSWER 8 OF 33 EUROPATFULL COPYRIGHT 2002 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 1033405 EUROPATFULL ED 20000917 EW 200036 FS OS
TIEN Sequence-determined DNA fragments and corresponding polypeptides encoded
thereby.
TIDE DNS-fragmente mit bestimmter Sequenz und die dadurch kodierte
Polypeptide.
TIFR Fragments d'ADN avec des sequences determinees et polypeptides encodees
par lesdits fragments.
IN Alexandrov, Nickolai, 1404 Oak Trail St., Thousand Oaks, CA 91320, US;
Brover, Vyacheslav, 5916 N. Las Virgenes Rd. #590, Calabasas, CA 91302,
US;
Chen, Xianfeng, 1705 S. Westgate Ave. #2, Los Angeles, CA 90025, US;
Subramanian, Gopalakrishnan, 4205 Peach Slope Rd., Moorpark, CA 93021,
US;
Troukhan, Maxim E., 1675 Amberwood Dr. #2, South Pasadena, CA 91030, US;
Zheng, Liansheng, 12333 Wild Turkey Court, #B, Creve Coeur, MO 63141,
US;
Dumas, J., US
PA Ceres Incorporated, 3007 Malibu Canyon Road, Malibu, CA 90265, US
SO Wila-EPZ-2000-H36-T1a
DS R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE;
R IT; R LI; R LU; R MC; R NL; R PT; R SE; R AL; R LT; R LV; R MK; R RO;
R SI
PIT EPA2 EUROPÄISCHE PATENTANMELDUNG
PI EP 1033405 A2 20000906
OD 20000906
AI EP 2000-301439 20000225
PRAI US 1999-121825 19990225
US 1999-123180 19990305
US 1999-123548 19990309
US 1999-125788 19990323
US 1999-126264 19990325
US 1999-126785 19990329
US 1999-127462 19990401
US 1999-128234 19990406
US 1999-128714 19990408
US 1999-129845 19990416
US 1999-130077 19990419
US 1999-130449 19990421
US 1999-130891 19990423
US 1999-130510 19990423
US 1999-131449 19990428
US 1999-132407 19990430
US 1999-132048 19990430
US 1999-132484 19990504
US 1999-132485 19990505
US 1999-132487 19990506
US 1999-132486 19990506
US 1999-132863 19990507
US 2000-176866 20000119
US 2000-176867 20000119
US 2000-176910 20000119
US 2000-178166 20000126

US	2000-178545	20000127		
US	2000-178547	20000127		
US	2000-177666	20000127		
US	2000-178546	20000127		
US	2000-178544	20000127		
US	2000-178754	20000128		
US	2000-178755	20000128		
US	2000-179388	20000201		
US	2000-179395	20000201		
US	2000-180139	20000203		
US	2000-180039	20000203		
US	2000-180206	20000204		
US	2000-180207	20000204		
US	2000-180696	20000207		
US	2000-180695	20000207		
US	2000-181214	20000209		
US	2000-181228	20000209		
US	2000-181551	20000210		
US	2000-181476	20000210		
US	2000-182478	20000215		
US	2000-182477	20000215		
US	2000-182516	20000215		
US	2000-182512	20000215		
US	2000-183166	20000217		
US	2000-183165	20000217		
IC	ICM C12N015-29			
ICS	C12N015-82	C07K014-415	C12Q001-68	A01H005-00

L14 ANSWER 9 OF 33 USPATFULL
AN 1999:27182 USPATFULL
TI **Glutamine: fructose-6-phosphate
amidotransferase**, its production and use
IN Nishi, Kazunori, 16-1-402 Namiki 4-chome, Tsukuba, Ibaraki, Japan
Hikichi, Yukiko, 21-2-1-504, Matsushiro 4-chome, Tsukuba, Ibaraki, Japan
Shintani, Yasushi, 7-9-703, Kasuga 1-chome, Tsukuba, Ibaraki, Japan 305
PI US 5876713 19990302
AI US 1997-911445 19970812 (8)
PRAI JP 1996-213944 19960813
DT Utility
FS Granted
LN.CNT 3620
INCL INCLM: 424/094.500
INCLS: 514/012.000; 435/193.000
NCL NCLM: 424/094.500
NCLS: 435/193.000; 514/012.000
IC [6]
ICM: C12N009-10
ICS: A61K038-45
EXF 435/193; 424/94.5; 514/12
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 10 OF 33 CAPLUS COPYRIGHT 2002 ACS
AN 1998:493700 CAPLUS
DN 129:121714
TI Process for production of N-**glucosamine**
IN Berry, Alan; Burlingame, Richard P.; Millis, James R.
PA Bio-Technical Resources, USA; Berry, Alan; Burlingame, Richard P.; Millis,
James R.
SO PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9830713	A1	19980716	WO 1998-US800	19980114
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				

DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
 NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
 UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
 FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
 GA, GN, ML, MR, NE, SN, TD, TG

AU 9859604 A1 19980803 AU 1998-59604 19980114
 US 6372457 B1 20020416 US 1998-115475 19980715
 PRAI US 1997-35494P P 19970114
 WO 1998-US800 W 19980114

L14 ANSWER 11 OF 33 EUROPATFULL COPYRIGHT 2002 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 824149 EUROPATFULL ED 19980302 EW 199808 FS OS
 TIEN **Glutamine: fructose-6-phosphate**
amidotransferase (GFAT), its production and use.
 TIDE **Glutamine: Fructose-6-Phosphate**
Amidotransferase (GFAT), seine Herstellung und Verwendung.
 TIFR **Glutamine: fructose-6-phosphate**
amidotransferase (GFAT), sa production et son utilisation.
 IN Nishi, Kazunori, 16-1-402, Namiki 4-chome, Tsukuba, Ibaraki 305, JP;
 Shintani, Yasushi, 7-9-703, Kasuga 1-chome, Tsukuba, Ibaraki 305, JP;
 Hikichi, Yukiko, 21-2-1-504, Matsushiro 4-chome, Tsukuba, Ibaraki 305,
 JP
 PA Takeda Chemical Industries, Ltd., 1-1 Doshomachi 4-chome, Chuo-ku,
 Osaka-shi, Osaka 541, JP
 SO Wila-EPZ-1998-H08-T1a
 DS R AT; R BE; R CH; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE; R IT;
 R LI; R LU; R MC; R NL; R PT; R SE
 PIT EPA2 EUROPAEISCHE PATENTANMELDUNG
 PI EP 824149 A2 19980218
 OD 19980218
 AI EP 1997-113934 19970813
 PRAI JP 1996-213944 19960813
 IC ICM C12N015-54
 ICS C12N009-10 A61K038-45 C07K016-40 C12Q001-48
 ICA C12Q001-68.
 A01K067-027

L14 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2002 ACS

AN 1987:534659 CAPLUS
 DN 107:134659
 TI **Synthesis** and biological properties of N3-(4-methoxyfumaryl)-L-
 2,3-diaminopropanoic acid dipeptides. A novel group of antimicrobial
 agents
 AU Andruszkiewicz, Ryszard; Chmara, Henryk; Milewski, Slawomir; Borowski,
 Edward
 CS Dep. Pharm. Technol. Biochem., Tech. Univ. Gdansk, Gdansk, 80-952, Pol.
 SO J. Med. Chem. (1987), 30(10), 1715-19
 CODEN: JMCMAR; ISSN: 0022-2623
 DT Journal
 LA English
 OS CASREACT 107:134659

L14 ANSWER 13 OF 33 DGENE (C) 2002 THOMSON DERWENT

AN AAY58827 Protein DGENE
 TI **Fermentation** of E. coli having an altered amino acid sugar
 metabolic pathway to produce **glucosamine**, especially using
 novel recombinant variant **glucosamine-6-**
phosphate synthases -
 IN Berry A; Burlingame R P; Millis J R
 PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
 PI WO 2000004182 A1 20000127 150p
 AI WO 1999-US15976 19990715

PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 14 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAY58826 Protein DGENE
TI **Fermentation** of E. coli having an altered amino acid sugar
metabolic pathway to produce **glucosamine**, especially using
novel recombinant variant **glucosamine-6-**
phosphate synthases -
IN Berry A; Burlingame R P; Millis J R
PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
PI WO 2000004182 A1 20000127 150p
AI WO 1999-US15976 19990715
PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 15 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAY58825 Protein DGENE
TI **Fermentation** of E. coli having an altered amino acid sugar
metabolic pathway to produce **glucosamine**, especially using
novel recombinant variant **glucosamine-6-**
phosphate synthases -
IN Berry A; Burlingame R P; Millis J R
PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
PI WO 2000004182 A1 20000127 150p
AI WO 1999-US15976 19990715
PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 16 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAY58824 Protein DGENE
TI **Fermentation** of E. coli having an altered amino acid sugar
metabolic pathway to produce **glucosamine**, especially using
novel recombinant variant **glucosamine-6-**
phosphate synthases -
IN Berry A; Burlingame R P; Millis J R
PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
PI WO 2000004182 A1 20000127 150p
AI WO 1999-US15976 19990715
PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 17 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAY58823 Protein DGENE
TI **Fermentation** of E. coli having an altered amino acid sugar
metabolic pathway to produce **glucosamine**, especially using
novel recombinant variant **glucosamine-6-**
phosphate synthases -
IN Berry A; Burlingame R P; Millis J R
PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
PI WO 2000004182 A1 20000127 150p
AI WO 1999-US15976 19990715
PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 18 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAY58822 Protein DGENE

TI **Fermentation** of E. coli having an altered amino acid sugar
 metabolic pathway to produce **glucosamine**, especially using
 novel recombinant variant **glucosamine-6-**
phosphate synthases -
 IN Berry A; Burlingame R P; Millis J R
 PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
 PI WO 2000004182 A1 20000127 150p
 AI WO 1999-US15976 19990715
 PRAI US 1998-115475 19980715
 DT Patent
 LA English
 OS 2000-182441 [16]

L14 ANSWER 19 OF 33 DGENE (C) 2002 THOMSON DERWENT
 AN AAZ58258 DNA DGENE
 TI **Fermentation** of E. coli having an altered amino acid sugar
 metabolic pathway to produce **glucosamine**, especially using
 novel recombinant variant **glucosamine-6-**
phosphate synthases -
 IN Berry A; Burlingame R P; Millis J R
 PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
 PI WO 2000004182 A1 20000127 150p
 AI WO 1999-US15976 19990715
 PRAI US 1998-115475 19980715
 DT Patent
 LA English
 OS 2000-182441 [16]

L14 ANSWER 20 OF 33 DGENE (C) 2002 THOMSON DERWENT
 AN AAZ58257 DNA DGENE
 TI **Fermentation** of E. coli having an altered amino acid sugar
 metabolic pathway to produce **glucosamine**, especially using
 novel recombinant variant **glucosamine-6-**
phosphate synthases -
 IN Berry A; Burlingame R P; Millis J R
 PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
 PI WO 2000004182 A1 20000127 150p
 AI WO 1999-US15976 19990715
 PRAI US 1998-115475 19980715
 DT Patent
 LA English
 OS 2000-182441 [16]

L14 ANSWER 21 OF 33 DGENE (C) 2002 THOMSON DERWENT
 AN AAZ58256 DNA DGENE
 TI **Fermentation** of E. coli having an altered amino acid sugar
 metabolic pathway to produce **glucosamine**, especially using
 novel recombinant variant **glucosamine-6-**
phosphate synthases -
 IN Berry A; Burlingame R P; Millis J R
 PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
 PI WO 2000004182 A1 20000127 150p
 AI WO 1999-US15976 19990715
 PRAI US 1998-115475 19980715
 DT Patent
 LA English
 OS 2000-182441 [16]

L14 ANSWER 22 OF 33 DGENE (C) 2002 THOMSON DERWENT
 AN AAZ58255 DNA DGENE
 TI **Fermentation** of E. coli having an altered amino acid sugar
 metabolic pathway to produce **glucosamine**, especially using
 novel recombinant variant **glucosamine-6-**
phosphate synthases -
 IN Berry A; Burlingame R P; Millis J R
 PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
 PI WO 2000004182 A1 20000127 150p

AI WO 1999-US15976 19990715
PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 23 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAZ58254 DNA DGENE
TI **Fermentation** of E. coli having an altered amino acid sugar metabolic pathway to produce **glucosamine**, especially using novel recombinant variant **glucosamine-6-phosphate synthases** -
IN Berry A; Burlingame R P; Millis J R
PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
PI WO 2000004182 A1 20000127 150p
AI WO 1999-US15976 19990715
PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 24 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAZ58253 DNA DGENE
TI **Fermentation** of E. coli having an altered amino acid sugar metabolic pathway to produce **glucosamine**, especially using novel recombinant variant **glucosamine-6-phosphate synthases** -
IN Berry A; Burlingame R P; Millis J R
PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
PI WO 2000004182 A1 20000127 150p
AI WO 1999-US15976 19990715
PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 25 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAZ58252 DNA DGENE
TI **Fermentation** of E. coli having an altered amino acid sugar metabolic pathway to produce **glucosamine**, especially using novel recombinant variant **glucosamine-6-phosphate synthases** -
IN Berry A; Burlingame R P; Millis J R
PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
PI WO 2000004182 A1 20000127 150p
AI WO 1999-US15976 19990715
PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 26 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAZ58251 DNA DGENE
TI **Fermentation** of E. coli having an altered amino acid sugar metabolic pathway to produce **glucosamine**, especially using novel recombinant variant **glucosamine-6-phosphate synthases** -
IN Berry A; Burlingame R P; Millis J R
PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
PI WO 2000004182 A1 20000127 150p
AI WO 1999-US15976 19990715
PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 27 OF 33 DGENE (C) 2002 THOMSON DERWENT

AN AAZ58250 DNA DGENE
TI **Fermentation** of E. coli having an altered amino acid sugar metabolic pathway to produce **glucosamine**, especially using novel recombinant variant **glucosamine-6-phosphate synthases** -
IN Berry A; Burlingame R P; Millis J R
PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
PI WO 2000004182 A1 20000127 150p
AI WO 1999-US15976 19990715
PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 28 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAZ58249 DNA DGENE
TI **Fermentation** of E. coli having an altered amino acid sugar metabolic pathway to produce **glucosamine**, especially using novel recombinant variant **glucosamine-6-phosphate synthases** -
IN Berry A; Burlingame R P; Millis J R
PA (DCVB-N) DCV INC DBA BIO-TECH RESOURCES.
PI WO 2000004182 A1 20000127 150p
AI WO 1999-US15976 19990715
PRAI US 1998-115475 19980715
DT Patent
LA English
OS 2000-182441 [16]

L14 ANSWER 29 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAV45208 DNA DGENE
TI **Fermentative** production of N-**glucosamine** from genetically modified **microorganism** - having altered amino sugar metabolism, particularly transformed with gene for N-**glucosamine-6-phosphate synthase**, useful for treatment of osteoarthritic disorders
IN Berry A; Burlingame R P; Millis J R
PA (BIOT-N) BIO TECH RESOURCES.
PI WO 9830713 A1 19980716 90p
AI WO 1998-US800 19980114
PRAI US 1997-35494 19970114
DT Patent
LA English
OS 1998-399157 [34]

L14 ANSWER 30 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAV45207 DNA DGENE
TI **Fermentative** production of N-**glucosamine** from genetically modified **microorganism** - having altered amino sugar metabolism, particularly transformed with gene for N-**glucosamine-6-phosphate synthase**, useful for treatment of osteoarthritic disorders
IN Berry A; Burlingame R P; Millis J R
PA (BIOT-N) BIO TECH RESOURCES.
PI WO 9830713 A1 19980716 90p
AI WO 1998-US800 19980114
PRAI US 1997-35494 19970114
DT Patent
LA English
OS 1998-399157 [34]

L14 ANSWER 31 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAV45206 DNA DGENE
TI **Fermentative** production of N-**glucosamine** from genetically modified **microorganism** - having altered amino sugar metabolism, particularly transformed with gene for N-**glucosamine-6-phosphate synthase**, useful for treatment

of osteoarthritic disorders
IN Berry A; Burlingame R P; Millis J R
PA (BIOT-N) BIO TECH RESOURCES.
PI WO 9830713 A1 19980716 90p
AI WO 1998-US800 19980114
PRAI US 1997-35494 19970114
DT Patent
LA English
OS 1998-399157 [34]

L14 ANSWER 32 OF 33 DGENE (C) 2002 THOMSON DERWENT
AN AAV45205 DNA DGENE
TI **Fermentative** production of N-glucosamine from
genetically modified **microorganism** - having altered amino sugar
metabolism, particularly transformed with gene for N-glucosamine
-6-phosphate synthase, useful for treatment
of osteoarthritic disorders
IN Berry A; Burlingame R P; Millis J R
PA (BIOT-N) BIO TECH RESOURCES.
PI WO 9830713 A1 19980716 90p
AI WO 1998-US800 19980114
PRAI US 1997-35494 19970114
DT Patent
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OS 1998-399157 [34]

L14 ANSWER 33 OF 33 DPCI (C) 2002 THOMSON DERWENT
AN 1998-399157 [34] DPCI
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DNC C1998-120998
TI **Fermentative** production of N-glucosamine from
genetically modified **microorganism** - having altered amino sugar
metabolism, particularly transformed with gene for N-glucosamine
-6-phosphate synthase, useful for treatment
of osteoarthritic disorders.

DC B03 C02 D16
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PA (BIOT-N) BIO TECH RESOURCES; (ARKI-N) ARKION LIFE SCI LLC
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FDT AU 9859604 A Based on WO 9830713
PRAI US 1997-35494P 19970114; US 1998-115475 19980715
IC ICM C12P019-00; C12P019-26
ICS C12N001-00; C12N001-21
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PNC.D 0 Cited Patents Count
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CRC.I 0 Cited Literature References Count (by inventor)
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